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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/638,346	08/15/2000	Danny Leroy Fleming	55680USA9A.002	2529

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Attn Dale A Bjorkman
Office Of Intellectual Property Counsel
3M Innovative Properties Company
P O Box 33427
St Paul, MN 55133-3427

EXAMINER

EGAN, BRIAN P

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 01/16/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

82 10

Office Action Summary	Application No.	Applicant(s)	
	09/638,346	FLEMING ET AL.	
	Examiner	Art Unit	
	Brian P. Egan	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,10,12,13 and 16-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,10,12,13 and 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The corrected or substitute drawings were received on August 29, 2002. These drawings are no longer faded and easily readable.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4-6, 10, 12-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calhoun et al. (#5,462,765).

Calhoun et al. ('765) teach a release liner (Fig. 2) for an adhesive backed article (Col. 1, lines 11-16) comprising a surface with an arrangement of structures thereon, wherein the structures are ridges that extend upward from a plane of the surface (Fig. 2), and wherein the structures have at least one sidewall that makes an angle with respect to the plane of the surface of greater than zero degrees and less than ninety degrees selected to enhance adhesion to a tape (Col. 4, lines 57-62). The angle can be further limited between thirty and fifty degrees (Col. 6, lines 26-28). The ridges form a regular and continuous pattern on the surface (Fig. 2; Col. 4, lines 66-67). The ridges have a trapezoidal cross-sectional shape with a flat top (Fig. 2). The adhesive backed article further comprises an imaged film layer, which in itself is a handling tape, on a surface opposite the adhesive layer (Col. 8, lines 33-36). The ridges have a pitch from 50-250 μ m

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thereby rendering the pitch outside the range of the claimed invention. However, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have modified the pitch size such that it falls within the range of 500 to 2500 micrometers since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, although Calhoun et al. ('765) do not explicitly state that the sidewall angle is selected to enhance adhesion to a tape, the aforementioned limitation is merely an intended use of the sidewall angle. It has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*. 2 USPQ2d 1647 (1987).

3. Claims 1, 4-7, 10, 12-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Calhoun et al. (#5,897,930).

Calhoun et al. ('930) teach a release liner (see Abstract) for an adhesive backed article comprising a surface with an arrangement of ridged, substantially trapezoidal structures thereon (Figs. 1-2; Col. 6, line 30), wherein the structures extend upward from a plane of the surface (Figs. 1-2). The adhesive backed article comprises an imaged film layer, which in itself is a handling tape, on the surface opposite the release liner (Col. 1, lines 15-31; see also Col. 2, lines 38-55). Although Calhoun et al. ('930) do not explicitly state the angles of the sidewalls, Calhoun et al. ('930) state that "the sidewalls of embossings for any of pattern 24, pattern 26, or any combination of them, can be any shape desired, ranging from a constant radius of curvature to any polygonal shape of at least 2 surfaces within the pattern 24 or 26. Nonlimiting examples of shapes of

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embossing, in cross-section, include curved, rectangular, trapezoidal, triangular, bimodal, and the like (Col. 6, lines 25-31).” Note that the aforementioned quote would allow the release liner to be formed with overlapping ridges depending on the desired end product. Therefore, it would have been an obvious matter of design choice to one of ordinary skill in the art at the time applicant’s invention was made to have modified the release liner to have sidewalls ranging in angles from 0-90 degrees and to have overlapping ridges based on the desired end product as taught by Calhoun et al. (‘930) above. Calhoun et al. (‘930) further teach that the pitch of the embossings is less than 200µm (Col. 6, lines 43-47) and also give an example wherein a .25mm diameter embosser is used to place 190 posts per square centimeter in a square lattice pattern (Col. 7, lines 46-50). Although the pitch size as claimed by Calhoun et al. (‘930) is outside of the Applicant’s claimed range, it would have been obvious to one of ordinary skill in the art at the time applicants invention was made to have modified the pitch size such that it falls within the range of 500 to 2500 micrometers since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Furthermore, although Calhoun et al. (‘930) do not explicitly state that the sidewall angle is selected to enhance adhesion to a tape, the aforementioned limitation is merely an intended use of the sidewall angle. It has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*. 2 USPQ2d 1647 (1987).

4. Claims 1, 4-6, 10, 12-13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abe (WO 99/35201).

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Abe teaches a release liner for an adhesive backed article comprising a surface with an arrangement of structures thereon, wherein the structures extend upward from a plane of the surface (see Abstract). The structures are trapezoidal ridges that form a continuous and regular pattern wherein the ridges have a pitch between 50 and 1000 μ m (or a pitch between 150 and 11,000 μ m according to the applicants remarks – regardless, Abe teaches a pitch value within the Applicant's claimed range). The adhesive article further comprises an imaged film layer, which in itself is a handling tape, on a surface of the adhesive opposite the release liner (p.10, line 8 to p.11, line 7). Although Abe is silent in relation to the angle of the sidewalls of the release liner, it is notoriously well known that a trapezoid is a "quadrilateral with two parallel sides (*Webster's II New Riverside University Dictionary*, The Riverside Publishing Company: Boston, MA. 1984)." Abe teaches that, "the depressed portion surrounded by the projections had the trapezoidal section in the vertical direction (p.13, lines 22-23)." Therefore, one of ordinary skill in the art would recognize that the top and bottom surfaces of the trapezoidal projection are parallel and the side walls form the angles of the trapezoid. Thus, even if one of the side walls is set at a 90 degree angle, the other side wall cannot be 90 degrees or it would be parallel with the other sidewall and a square or rectangle would be formed rather than a trapezoid. Given that the structures project into the grooves of the adhesive layer (p.13, lines 18-20), the angles formed must be 90 degrees or less, because it would be impossible to match the projection with the groove if the top portion of the projection were wider than the base (since it would be impossible to force the top portion through an opening the size of the narrow base). Therefore, at least one of the sidewalls has an angle from 0-90 degrees. Given that the angle can fall anywhere

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within this range, the further limitation of an angle between 30 and 50 degrees is also met (unfortunately, Abe (WO 99/35201) is not provided with any figures depicting the claimed structure to help in simplifying the aforementioned analysis). Furthermore, even if the side walls were to be the parallel sides, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the projecting structures such that the side walls were the non-parallel sides of the parallelogram thereby making at least one side wall with an angle of less than 90 degrees (based on the above analysis) for the purpose of providing a structure that can match with the groove of an alternate embodiment of the adhesive layer. It has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Also note that although Abe does not explicitly state that the sidewall angle is selected to enhance adhesion to a tape, the aforementioned limitation is merely an intended use of the sidewall angle. It has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*. 2 USPQ2d 1647 (1987).

Response to Remarks

5. Applicant's arguments with respect to claims 1, 4-7, 10, 12-13, and 16-18 have been considered but are moot in view of the new ground(s) of rejection.
6. Pursuant to the Applicant's remarks and amended claims, the Examiner has withdrawn the 35 U.S.C. 112, first and second paragraph rejections from the previous office action, paper no. 6. The Examiner has also withdrawn all rejections in relation to

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Mikami et al. (copending application no. 09/311,101) since both the present application and the cited copending application are of the same assignee and were of the same assignee at the time of filing the applications.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian P. Egan whose telephone number is 703-305-3144. The examiner can normally be reached on M-F, 8:30-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Y. Pyon can be reached on 703-308-4251. The fax phone numbers for

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the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

BPE
January 8, 2003



HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

1/10/23